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ART. 1.—*History of the American Medical Association.*

BY ONE OF ITS MEMBERS.

THE prominence given to the subject of constitutional amendments, in the meeting of the Association at Richmond, Va., was the means of attracting to it much attention on the part of the profession generally. Hence, we find it a frequent topic of discussion during the succeeding year, both in the medical periodicals and local societies. That the reader may understand more fully the merits of the subject, it is necessary to state that the Constitution of the Association provides for the admission of permanent members, of delegates from medical societies, colleges, and hospitals, and of members by invitation. The permanent members, however, consist of those who have served as delegates. or who have been elected by a *unanimous* vote, and have not the privilege of voting in the meetings of the Association.

The members by *invitation* are, by the Constitution, composed only of such members of the profession as should attend the annual meetings from sections of the country "not otherwise represented at the meeting," and who should be recommended by one or more of the regular members of the Association, and their connection with the Association ceased with the adjournment of the annual meeting at which they were present. The plain and unmistakable intent of this clause of the Constitution was simply to provide a way by which such members of the profession as should choose to attend the annual meetings from remote districts of country, from which no regular delegates had been appointed,

could be introduced, and permitted to take part in the proceedings of the Association.

At several of the meetings, however, it was made to cover the admission of members by *invitation* directly from the vicinity of the place of meeting, and from districts otherwise fully represented by delegates from medical societies, &c. These plain violations of the true intent of the constitutional provision, created much prejudice against the rule itself, and led to several attempts to amend, or expunge it altogether. Hence, in the propositions which were recommended for adoption, as amendments to the Constitution, at the meeting in Richmond, this provision was to be wholly omitted. If we remember, however, that there are still extensive regions of country, especially in the more recently settled States and territories, in which neither medical societies nor colleges exist, and yet from which a few reputable members of the profession might come to the annual meetings, we shall see good reason why a provision should exist by which they could be made temporary members, and allowed to participate in the proceedings. The fault hitherto has not been in the rule, but in the *practice* under the rule. The great body of active members of the American Medical Association was designed by the Constitution to come under the second class named, *i. e.*, *delegates* from medical societies, colleges, and hospitals.

Each State, district, or county medical society, possessing a regular and permanent organization, was allowed to send *one delegate* for every *ten* of its resident members, and an additional delegate for a fraction of more than five members. Each regularly organized medical college was permitted to send *two* delegates, and each hospital containing one hundred beds for the sick was allowed two.

Such were, and still are, the constitutional provisions in relation to membership in the Association. It was manifest, in the meeting at Richmond, that two distinct parties sought to alter these provisions. The first, represented by Dr. Hays, as chairman of the Special Committee appointed at the annual meeting in Charleston, simply objected to the inequality in the ratio of representation, and proposed to remedy it by restricting the number of delegates from each college and hospital to *one* annually, and from each *State* medical society, in States containing district

and county societies, to *four* annually, while the ratio from local societies and associations should be unchanged. The second party, represented by Dr. Yardley, of Pa., who was a member of the same committee with Dr. Hays, not only objected to the present *ratio* of representation, but objected to *any* representation, except from county, district, and State societies. It was claimed, by this party, that the admission of delegates from colleges and hospitals not only led to an inequality in the ratio of representation, but recognized and perpetuated the unnecessary distinction between professors and laymen in the profession. Hence, they proposed, on the one hand, to strike out all provisions for the reception of delegates, except from county, district, and State medical societies; and, on the other, to make "all the members of the medical profession who are attached to properly organized county, or district, and State medical societies throughout the United States," nominally members of the Association. It will be remembered that, at the meeting in Richmond, the whole subject was again referred to a special committee, of which Dr. F. Campbell Stewart, of N. Y., was chairman. This committee, in attempting to unite the views of both the parties named, reported the propositions which have already been quoted at length, and which were recommended for adoption at the annual meeting to be held in New York.

The objection urged against allowing each medical college, with a faculty of only six or seven members, to send *two* delegates, while it requires *twenty* members of the profession, incorporated in a medical society, to send an equal number, was so plausible in itself, that the whole series of proposed amendments seemed to meet with general favor. They were commended by some of the medical journals, and discussed and approved by several local societies in different sections of the Union. On the other hand, a few made decided opposition to their adoption. By such, it was claimed that the adoption of the proposition to make all who are, or might become members of the local medical societies, members of the American Medical Association, would not only greatly lessen the importance and value of such membership, but would also "enable every brazen-faced pretender in medicine to arrogate to himself the title of MEMBER of the Amer. Med. Association." It was justly claimed that one of the import-

ant advantages derived from all social organizations in the profession, was the stimulus they afford to individual ambition or emulation. The desire to occupy an honorable position in the estimation of our fellows, is one of the most powerful incentives to individual industry and good conduct. If, to gain a membership in the great national organization, it is necessary to have local societies—and necessary that individuals should not only become members thereof, but members in such standing as to command the suffrages of their fellows—it constitutes a very strong inducement both to social organization and individual improvement. It was also claimed, that though the present ratio of representation was apparently unequal, yet practically no evils had resulted from such inequality, while there were many reasons against the proposed change. One of the leading articles which appeared during the year in opposition to the proposed amendments, was from the pen of Dr. N. S. Davis, of Chicago, and contained in the *Northwestern Medical and Surgical Journal*, for March, 1853.

In reference to the ratio of representation, Dr. Davis says:—

"At the organization of the Association, it was very generally thought to be an object of great importance to secure the active and hearty co-operation of the medical colleges. The free intermingling annually, of delegates from those institutions, with others from the great mass of the profession, by which each would become more familiar with the wishes, embarrassments, and advantages of the other, was thought to be the most desirable and certain method of securing this important end. The framers of the Constitution, having much more reference to the accomplishment of a great object than to the attainment of a nice numerical *equality* in the ratio of representation, provided for the admission of *two* delegates from each college and hospital. Has anything occurred in the practical working of the provision that calls for a change? In casting a hasty glance over the list of delegates in attendance at each meeting of the Association since its formation, I find the ratio of representation to be substantially as follows, viz:—

Members enrolled as Delegates in	1847.	1848.	1849.	1850.	1851.	1852.
From Societies	178	208	375	208	182	226
From Medical Colleges . .	59	45	51	34	30	39
From Hospitals	2	24	20	13	10	9
Total average from Medical Societies during six years . .						230
" " " Colleges " " " . .						42
" " " Hospitals " " " . .						13

"Certainly these figures furnish no evidence that medical schools have hitherto been too largely represented, the actual average number in attendance having scarcely exceeded *one* for each school in the Union. Hence, if they are allowed any representation, the benefits to result from reducing their ratio are not very apparent."

Nothing could demonstrate more clearly the practical inutility of making any reduction in the ratio of representation from the colleges than the above figures. In regard to the proposition to impose certain conditions on the colleges, to be complied with before being entitled to any representation, the same writer remarks as follows, viz:—

"These conditions are all right enough in themselves, but entirely out of place in the *Constitution* of a great national association. They constitute unnecessary details, that almost inevitably involve the Association in the most glaring inconsistencies. Indeed, the very next section of this same proposed amendment affords a striking instance of such inconsistency. In this, to avoid the awkward necessity of excluding the University of Virginia, the Association is constrained, by the terms of the amendment, to acknowledge that, under some circumstances, neither *six* professors, nor *three* years' study, nor *two* courses of lectures, are necessary; and that, too, after the annually reiterated recommendation of *longer* college terms, *longer* periods of study, a *greater* number of courses of lectures, and *seven* professors. It seems to me that all this talk and hair-splitting nicety about constitutional provisions, for an association organized for the purpose of elevating and advancing the condition of one of the most learned and beneficent professions that exist in human society, involves an unnecessary waste of most valuable time; and is far better calculated to engender jealousies and divisions than to foster that spirit of liberal friendship and

noble zeal for the advancement of our science, which should extend their genial influences to the remotest corners of our country. . . . . .

"While I admit that the present constitutional ratio of representation is *theoretically* unequal, yet it certainly has not, thus far, developed in practice any important abuses; and hence, instead of risking the harmony of diverse interests and feelings by constant attempts at more nice constitutional adjustments, every effort should be made to cultivate a broader liberality, a freer communion of those representing all legitimate interests, and a more patient, diffusive, and energetic spirit of scientific research. And I am fully convinced that these important objects would be more speedily and certainly accomplished, if the Association would appoint fewer committees, exact more prompt and carefully digested reports, and induce all its members to come up to the annual meetings, prepared, in the true spirit of candor and liberality, to examine every report and paper presented, for the purpose of adding whatever of interest their own experience and observation had furnished in relation thereto. Such a course, pursued in such a spirit, would not only carry the Association onward through a long career of prosperity and usefulness, but would give to all its general recommendations, in relation to medical education and literature, greatly increased effect."

It is evident, from the discussions which took place during the meeting of the Association at Richmond and subsequently, that many members had failed to perceive clearly the true relations of the Association to the profession, or the objects of its Constitution. They seemed to look upon the national organization in the same light as a representative civil government, whose acts were laws of binding import, and whose basis of representation must consequently be adjusted with the same nice care to the equality of diverse or separate interests. It seemed to be forgotton that the Association was entirely a voluntary organization, the acts of which carried with them no other force than the inherent justice of the acts themselves, coupled with the *moral* weight of the body from which they emanated; and that this *moral* weight would bear a close relation to the fulness of representation from those institutions whose interests were most involved in the movements proposed. Previous to the organi-

zation of the Association, there was no common ground on which the various interests of the profession could meet and devise measures in concert. Medical colleges had multiplied with great rapidity; State and district societies existed in only a small number of States; the standard of education, both preliminary and medical, was almost universally acknowledged to be too low, and yet the institutions of each State claimed to be equal with those of every other, and deemed it imprudent to take a step in advance. The great leading object of those who originated the movement for a national organization, and of those who framed the Constitution, was to bring the representatives of all the legitimate interests of the profession together, to establish a point of contact where mind should act directly on mind, and concentrate a power sufficient to counteract the repelling influences of sectional prejudices and the rivalry of individual institutions. Hence, instead of aiming at a close *equality* in the ratio of representation, they sought carefully for such provisions as would produce, on the one hand, the most full and free intermingling of representatives from all the regularly organized social and educational institutions in the profession; and, on the other, foster in the highest degree the spirit of scientific and professional improvement. How far they were successful, the sequel will show.

The delegates to the sixth annual meeting of the Association assembled in the Presbyterian Church, in Bleecker Street, New York city, at 11½ o'clock A. M., of May 3, 1853. They were welcomed in a very appropriate congratulatory address by Dr. F. Campbell Stewart, chairman of the Committee of Arrangements. The secretary read the list of delegates, so far as the names had been reported and registered, after which a committee of one from each State represented, was appointed to nominate officers for the ensuing year.

The number of delegates in attendence was unusually large. While the Committee for Nominating Officers were deliberating on their choice, Dr. Condie, of Pennsylvania, chairman of the Committee on Publications, submitted his annual report, together with that of the treasurer. They were accepted, and the Committee authorized to furnish the chairman of Committees on Epidemics with extra copies of their reports, at the expense of the Association; and also to send a full set of the *Transactions* of

the Association to the American Medical Society in Paris. Dr. Marshall Hall, of London, being present, he was invited to take a seat on the platform with the officers. The annual address was now delivered by the President, Dr. Beverly R. Wellford, of Virginia.

The address reviewed fully and ably the origin, progress, and benefits of the Association, with the objects which should still engage its attention. On motion of Dr. Hays, of Pennsylvania, the thanks of the Association were tendered to the President, and a copy of his address requested for publication in the *Transactions*. Dr. Joseph M. Smith, chairman of the Committee on Nominations, reported the following as suitable candidates for the several offices named:—

For President.

Dr. Jonathan Knight, of New Haven, Conn.

For Vice-Presidents.

Dr. Usher Parsons, of R. I.; Dr. Lewis Condict, of N. J.
Dr. Henry R. Frost, of S. C.; Dr. R. L. Howard, of Ohio.

For Secretaries.

Drs. Edward L. Beadle, of N. Y. City; and Edwin L. Lemoine, of Mo.

For Treasurer.

Dr. D. Francis Condie, of Penn.

The Committee also reported in favor of holding the next annual meeting at St. Louis, Missouri.

The report of the Committee was adopted by the Association, and Dr. Knight, on being conducted to the chair, returned his thanks, in a short but very appropriate address.

The attentive reader will have noticed that, with only one exception, the selection of President of the Association had been made from the profession in the city in which the annual meeting was being held. This practice had been so long followed that it came to be regarded almost as an established law; and hence a large portion of the profession were confidently expecting the election of Dr. Valentine Mott.

The New York delegation in the Association, however, had

presented to the Nominating Committee the name of Dr. John W. Francis.

There were some members of the Committee who denied both the justice and binding nature of the rule, which had been established merely by precedent. They claimed that its continuance would necessarily limit the highest honors of the Association to a favored few, who might chance to occupy a favorable place for an annual meeting, while all others would be excluded. The injustice of the rule and the absurdity of the principle on which it was established, were illustrated by the circumstances then before the Committee. There were then in the meeting of the Association, men whose heads were silvered over with age, who were revered at home and abroad, and who had labored assiduously to promote the interests of the Association, travelling hundreds of miles to attend its annual meetings; and yet their residence was such that they must be excluded from all chance of promotion. On the other hand, neither of the gentlemen whose names were before the Committee, had ever taken a prominent or even active part in promoting the interests of the Association. While it was cheerfully conceded that they were both among the first and most deservedly eminent members of the profession in the whole Union, it was claimed that they had not only failed to manifest an active interest in the doings of the Association, but that Dr. Mott belonged to a college[1] whose faculty had sought, at the very outset, to defeat entirely the formation of a national organization. These circumstances, together with the fact that New York had already furnished one president of the Association, in the person of Dr. Alexander H. Stevens, who was elected at the meeting in Baltimore, induced the Committee to regard the present as a very favorable opportunity for repudiating the rule which precedent had thus far established. Hence the Committee united in the recommendation of Dr. Jonathan Knight, of New Haven, who had taken a most active and efficient part in organizing and sustaining the Association, with all its legitimate interests; and to whose age and high standing in the profession were added all the qualities of a most efficient presiding officer. During the progress of the

[1] The Medical Department of the University of New York.

annual session, a variety of resolutions were offered, some of which were discussed and adopted, but none of them possessed sufficient importance or general interest to require mention.

Interesting reports were presented from special committees, on the following subjects, viz:—

"On Acute and Chronic Diseases of the Neck of the Uterus," by Dr. C. D. Meigs, of Philadelphia.

"On the Agency of the Refrigeration produced through Radiation of Heat as an Exciting Cause of Disease," by Dr. G. Emerson, of Philadelphia.

"On the Causes and Pathology of Typhoid Fever," by Dr. H. F. Campbell, of Georgia.

"On the Epidemics of Tennessee and Kentucky," by Dr. Sutton, of Kentucky.

"On Diseases of the Hip-joint," by Dr. Alden March, of Albany.

Dr. Gurdon Buck, of New York, read a paper on morbid growths within the larynx, and exhibited specimens to the Association. A report was also received from Dr. S. D. Gross, of Kentucky, on the results of surgical operations for the relief of malignant diseases. All these reports and papers were received and referred to the Committee on Publications, without being read in full before the Association. They may be found in the volume of *Transactions* for 1853; and contain a great amount of matter of scientific interest and practical value.

The report of the Committee on Medical Education was presented and read at length, by the chairman, Dr. Z. Pitcher, of Detroit, Michigan. This report, like those which had been presented to the preceding annual meetings on the same subject, recommended a higher standard of preliminary and professional education, and longer terms of college instruction, and contained many valuable suggestions. It, however, contained two novel features: the first consisted in a detailed statement of the organization and course of instruction adopted by the medical department of the University of Michigan, thereby making the report a useful advertisement for that particular institution; and the second, in a labored attempt to depreciate the value of clinical instruction in hospitals.

To the report were appended the following resolutions, which were adopted by the Association, viz:—

"*Resolved*, That the Association reaffirms its formerly expressed opinions on the value and importance of general education to the student and practitioner of medicine, and that it would gladly enlarge its rule on this subject, so as to include the humanities of the school, and the natural sciences.

"*Resolved*, That in the opinion of this Association, a familiar knowledge with the elements of medical science should precede clinical instruction.

"*Resolved*, That in order to accomplish the latter, the hospitals, when elevated to the rank of schools of practice, and the intelligent private preceptor, are the most efficient instrumentalities to be used for that purpose."

The report from the Committee on Medical Literature was presented and read in full, by Dr. N. S. Davis, of Chicago, Ill. It contained a full review of the literature of the profession in the United States for the year preceding the first day of March, 1853. The writer not only claimed that we possess a national medical literature of our own, but pointed out its characteristic features, with valuable suggestions in relation to its cultivation and improvement.

The whole number of medical periodicals published in the United States was reported to be twenty-eight; of which, four are issued quarterly; six bi-monthly; fifteen monthly; two semi-monthly; and one weekly. This, together with the report on Medical Education, may be found in Volume VI. of the *Transactions* of the Association.

Dr. Joseph M. Smith, chairman of the Committee on Volunteer Communications and Prize Essays, reported that fifteen essays had been received and examined by the Committee. Twelve of these were accompanied by sealed packets containing the names of the authors, and three contained the names of the authors in connection with the essays. The Committee awarded two prizes of $100 each, to the authors of the following essays, viz:—

The Cell: its Physiology, Pathology, and Philosophy, as deduced from original investigations; to which is added its History and Criticism. By Walter J. Burnett, M. D., of Boston, Mass.

The Surgical Treatment of certain Fibrous Tumors of the Uterus, heretofore considered beyond the resources of art. By Washington L. Atlee, M. D., of Philadelphia, Pa.

These essays, with appropriate illustrations, are embodied in Volume VI. of the *Transactions*, and occupy nearly 300 pages.

The whole volume of *Transactions* for 1853 contains 869 pages, and should certainly be in the library of every physician in the United States. The proposed amendments to the Constitution, which had occupied so much time during the meeting at Richmond, Va., and called forth some discussion in the medical journals, were called up for consideration on the third day of the session. On motion of Dr. A. H. Stevens, of New York, amended by Dr. Atkinson, of Virginia, their further consideration was *indefinitely postponed*, except the clause providing for the admission of delegates from the Medical Staffs of the United States Army and Navy, which was adopted.

The Committee on Nominations reported *twenty-five* special committees on scientific subjects, to report at the next annual meeting, and also the usual standing committees on Medical Literature, Medical Education, Volunteer and Prize Essays, Publication, and Arrangements. During the year preceding, three eminent members of the Association had departed this life, viz: Drs. Daniel Drake, of Cincinnati, Wm. E. Hornor and Isaac Parrish, of Philadelphia. Concerning each of these, appropriate resolutions were adopted by the Association. During the session, invitations were liberally extended to the Association to visit freely the numerous important public and charitable institutions in New York and its vicinity; the most generous hospitality was also manifested by the members of the profession residing in the city; and neither time nor money was spared by them in their efforts to render the annual meeting a pleasant and profitable one to all. On the evening of the third day of the session, an entertainment was provided in Metropolitan Hall, which, for extent and luxuriant magnificence, has probably never been equalled in our country. The number in attendance during the session was larger than on any previous anniversary occasion. "Thirty States and Territories, the District of Columbia, the Army and Navy of the United States, and the American Medical Society in Paris, were represented in the Association. There was one

member, by invitation, from Syria, and one from Canada West. The whole number of members in attendance was 573, and the whole number of institutions represented, 170."

All the proper business of the Association was conducted in harmony and with great good feeling.

Art. II.—*An Essay on Animal and Vegetable Life.*

By John B. Phillips, M. D.

(continued from page 348.)

Man's organism is a complex aggregation of many parts. In the arrangement of bones and muscles, he is simply a mechanical apparatus, a beautiful machine.

A great portion of the labor that we perform with our hands is nothing but machine labor. Modern invention has been, and is still doing much towards taking the drudgery out of the hands of the human, and giving it to the iron and wooden machine. Even that wonderful instrument, the human voice, by means of which we speak an articulate language, is nothing but a mechanical apparatus. Art not only can, but actually has been able to imitate it, or at least approximate it.

The stomach again is merely a chemical laboratory.

The chemist can reduce the food in precisely the same manner that it is reduced in the stomach, by artificial means.

The heart is simply an hydraulic apparatus for the purpose of pumping the blood into the system.

In the act of respiration, we have a mechanical and chemical action combined. Animal temperature is sustained by a purely chemical process, the burning of carbon and the elaboration of heat in the blood, by means of the oxygen inhaled in the lungs.

Thus we find that many of the operations that were formerly attributed to an unknown mysterious principle, called vital action, are, with slight modifications, the result of causes with which we have been familiar all our lives.

But I have brought forward these things at this time more particularly to illustrate what was previously alluded to, when

speaking of vascular and cellular action. I consider it of the highest importance, and one of the chief delights and encouragements in the pursuits of science. We meet with it at every step, and every new discovery affords a fresh demonstration of the fact, viz: That nature does not abandon her *initiative processes.* In other words, she does not altogether relinquish modes of action she has employed in her lower forms; but we always find them carried forward into the higher. When she lays the foundation, she builds upon that foundation.

The law of gravitation is universal in the inorganic world. I have just shown that cellular action is the basis of the nutritive process, and is universal in the organic world.

Again, the circulation of the sap in vascular plants is maintained by the action of the leaves and a peculiar power called endosmosis at the roots; this answers all the purposes of vegetable life. But in man, where there are certain parts of the system requiring irrigation by arterial blood, 30—40—60 times per minute, this endosmodic power is insufficient. It is not abandoned, however, but takes a subordinate place, while at the head of the circulating system we find that wonderful piece of mechanism—the human heart.

Thus there is a regular ascent. The old ways are not rejected, but modified while new, and more complex parts are added.

In the fungi, the circulation is that of a simple cell. In the human body, we have not only cellular but vascular action and capillary action, endosmodic, exosmodic, and cardiac action, and many others that I need not mention, all of which are necessary for its maintenance. Here we have a great variety of actions in a small compass.

From what has been said in reference to those actions that are simply mechanical, and those that are chemical, and those again that are a combination of the two, viz: digestion, respiration, and animal heat, it will be perceived that man is indeed a microcosm.

Man is a *cumulative* animal, if the expression may be allowed; an aggregation, combination, and sublimation of an infinite variety of parts!

All nature seems to have been gleaned and sifted in his pro-

duction; and consequently the study of man is as wide as the study of nature itself.

His body is the culminating point in the material universe! What has been eloquently said of his mental, is no less true of his physical endowments. "Man is the centre of nature and echo of the universe! What nature contains scattered and in fragments is united in the person of man. Every isolated feeling, every sound in nature, is to pass through his personality and to centre in it. He is the great, perfect, and complete bell, that announces all, everything, while nature contains only parts of it, the sounds of which are dark and dull."

Beside the power resident in the primary germ of evolving from a crude plasma that blastema or nutriment, by means of which it enlarges and grows, we find it furnished with yet another of equal interest and importance. I refer to that action of germ-force as exhibited in the production of typical form, that peculiar power that causes every organic structure to assume a determinate form, and to grow up and be fashioned after an original type.

I am aware that there are seeming exceptions to this rule, both in plants and animals; among the latter, we sometimes have hybrids. But nature, ever careful of her typical forms, puts a sudden stop to this, by forbidding it to proceed beyond the first generation.

If we plant the seed of a common apple-tree, in all probability the fruit of the young will not exactly resemble that of the parent tree, but will be most likely much inferior in quality. The same may be said of many of our cultivated flowers, especially dahlias and roses, upon whose cultivation so much attention has been bestowed.

But these seeming exceptions, when examined, are found to be no exceptions at all.

Our domestic fruits and flowers are all the abnormal products of cultivation. They are not only abnormal, but diseased. We cultivate the fruit-tree with special reference to the production of fruit, without regard to the general health of the tree; and, though we thus increase the quantity and improve the quality of the fruit, the life of the tree is curtailed.

The farmers of this section of country feed their stock so as to

obtain an unnatural growth of fat; in France and Germany, they have a way of feeding geese, by which they produce an abnormal growth of liver; but there can be no doubt that, in both these cases, the health of the animal is injured.

Now we know that diseases are transmitted from generation to generation; but, circumstances being favorable, they finally disappear.

And thus it is with our cultivated fruits and flowers. Their seeming degeneration, instead of being a change of nature or species, is nothing more than a throwing off of disease, and a return to normality and health. All our varieties of apples were originally derived from the common sour crab; and the constant tendency of all apple-trees, when propagated in the natural way, is to return to the natural state.

With what modifications then that are produced by climate, by cultivation and disease, we may be perfectly assured that all classes, genera, and species, both of plants and animals, are precisely the same to-day that they were in the beginning of time.

The nutritive process only produces increase of *mass;* but the plastic power that is to give *form* to this mass is altogether a distinct principle.

This it is that requires every child to resemble its parent, having the same organs, senses, affections. The thorn will not produce grapes, nor the thistle figs. The Ethiopian cannot change his skin, nor the leopard his spots. This it is that prevents the production of the amorphous and incongruous, the unsymmetrical and incompatible. The monstrosities of the old mythology, with its dancing satyrs and singing sybils, its "hydras, gorgons, and chimeras dire," are the creations of the imagination alone.

In the Hell of Milton, the Inferno of Dante, and the Elysian shades of Æneas, they have their proper place. They belong to the land of shadows; in this upper breathing world we are perfectly secured against them by the law that like must forever beget its like.

Without this principle, the organic world would be a confused heap of chaotic materials, subject to a thousand disturbing causes in the elements around.

But it is the distinguishing characteristic of living beings that

they grow and develop themselves according to a law inherent in their own constitution, and this in spite and in derogation of the laws of matter. Living beings nullify the laws of matter to a certain extent in reference to themselves. Vital, chemical, and physical forces are continually grappling with each other! So long as the vital forces maintain the supremacy, we have life phenomena.

Hence life has been called a forced state; and a battle, and a march it is, no less physically than morally. The infant born into the world is placed as it were on the very brink of destruction! Nevertheless, by virtue of his vitality, he grows up to be the lord of creation. He lays hold of the corners of the earth, and couples the elements to minister to his necessities. The plastic power that regulates his physical growth confers upon him a form of unrivalled majesty and beauty. "A front like Jove to threaten and command! A station like the herald Mercury new lighted on a heaven-kissing hill." He moves, without a peer—the *paragon* of animals.

The pine upon the mountain-ledge towers for hundreds of feet in the air, in defiance of the law of gravitation, and all the confederate winds of heaven. The oak, whose mighty arms have wrestled with a thousand storms, still bears itself as proudly as when it reigned the king of the forest a century ago.

What are these gigantic structures but monuments of the supremacy of vital over the inorganic forces; a triumph of life on the battle-field of death! What is the beauty and symmetry of the human form, but the visible record of that plastic power imparted from the microscopic germ!

(TO BE CONCLUDED.)

ART. III.—*History of the Epidemic Scarlatina of* 1844–5.

BY WM. JOHNSON, M. D.

THE importance of recording the visitations of epidemic diseases; of marking their general assemblage of symptoms; and of detailing their most approved plans of treatment, is so obvious

as scarcely to need a comment. The subject rises in importance to us, in view of having a faithful record of the epidemic diseases of our native State preserved on the pages of our own MEDICAL REPORTER. This consideration has induced me to present the history of the epidemic scarlatina of 1844–5, as it exhibited itself in this section of the county of Hunterdon. An essay on this disease, read by Dr. John Honeyman, before the District Medical Society of Hunterdon, which received a formal vote of thanks from the society, struck me as possessing too much merit to be lost. A copy of this address I have obtained from Dr. Honeyman, and forward it, along with this article for publication in the REPORTER. The doctor's portraiture of the epidemic is faithful and graphic, and obviates the necessity of my going so much into detail as would otherwise be necessary. Dr. Honeyman's practice and my own run into each other, and the disease, of course, presented the same features to us both. I shall consequently pass by much of the semeiology, and notice other points of interest.

The epidemic commenced in the month of November, and continued to the following May. It presented every variety of shade, from scarlatina simplex to cynanche maligna; thus evidencing the identity and unity of these diseases. And, in fact, all its varieties were sometimes presented in the same family.

Although largely engaged in the practice of medicine for many years, I have witnessed only this one visitation of *epidemic scarlatina; sporadic* cases of this disease have fallen under my care; the disease, however, but seldom visits us, even in this form. The epidemic that I am now recording, *was the widest spread and most fearful* (not even excepting the typhoid dysentery of 1850) that I have ever witnessed. Indeed, I believe that it would have been a much easier task to have counted up the children who escaped its visitation, than those who were attacked by it; especially in those localities where it exhibited its greatest malignity. A circuit of fifty miles would hardly have embraced its ravages. I cannot, however, speak with very great certainty on this point. I heard of its extension twenty miles to the north of me, and it extended several miles to the south of me; how far on the east and west, I am not prepared to say.

Sometimes three or four in a family were victims of this fell

destroyer, and often was I deeply humbled at the impotency of our boasted art, when I beheld this disease, "killing with the certainty of the boa upas, and the rapidity of carbonic acid gas." I had my full share of cases, that were not amenable to any plan of treatment whatever; cases in which the blood poison was of such concentrated virulence, that the patient's condition was absolutely hopeless at the very threshold of his disease. In one family in particular, in which I attended, four children were cut down in rapid succession. A child would be playing about the floor to-day, and to-morrow be dead. I have visited a patient one day, and left him with no suspicion that death was very near at hand, and before I could get to see him the following day, was informed that he was a corpse. I was called in consultation to visit the only surviving child of a family consisting of three children, who had been stricken down in rapid succession. This child also fell a victim to the destroyer. The rate of mortality in this disease was fearfully great, but I have no statistics to determine it with certainty; in my own practice it was at least fifteen per cent. The disease, in some localities, and even in some families, exhibited a concentrated virulence—the blood poisoning was so rapidly developed. Happily, however, the disease, in a vast many instances, presented itself with less terrific aspect. In one family of eight or nine children, who were stricken down, with the mother, one death occurred, and he a very delicate child. Same large families would be carried through the visitation of the disease without a single death, and many cases occurred of so mild a character as not to need medical aid. Yet these were exceptions. Very many families had to record the death of more than one of its members. A number of adults, too, were its victims. The disease was, in a great measure, confined to childhood and adolescence; but some cases occurred in the mothers of more than a dozen children. Persons advanced to fifty years and upwards, were occasionally attacked.

When the patient emerged from the immediate effects of the blood poisoning, he was liable to inflammatory enlargement and suppuration of the salivary glands, particularly of the parotid and submaxilliary, and he was often cut off after protracted sufferings (sometimes two or three weeks) from constitutional irritation. I saw one instance where there was an opening from the

external abscess into the throat—it was a *large opening*. The patient sank under the irritation. A medical friend informed me that he lost *two* patients in one family, with hemorrhage from the erosion of arteries, and that a physician of his acquaintance had lost *one* patient in this manner. All these hemorrhages were observed in suppurating glands. In nearly every instance there was much tumefaction and ulceration of the throat. Very many of the cases were perfect cynanche maligna. As I have just observed, the parotid and submaxillary glands were, after the lapse of a few days, very much tumefied, and very frequently suppurated. There was nothing particularly noticeable in the peculiar eruption characteristic of the disease; it very generally occurred.

Such unusual numbers of lumbricoides were present in the majority of cases, as to give some countenance to the absurd theory of spontaneous generation, and the removal of these parasites was often a prominent indication in the treatment. I believe that in a *great majority* of cases a considerable number of lumbrici were discharged.

Anasarca was sometimes the sequel of this disease. I found no plan of treatment so effectual as the lancet, when it could be borne, and then nitre, squills, and digitalis.

I shall be very brief on the etiology of this disease. The rapidity with which it travelled, and its simultaneous explosion in different and distant neighborhoods, and among families who had had no intercourse with the sick, precluded the idea of contagion having prominence in its propagation. No doubt it played its part. But an indefinable atmospheric distemperature, such as occurs in cholera, yellow fever, influenza, had the principal agency in its spread.

My practice in this disease was tentative and eclectic, and, in mild cases, expectant. The perturbing treatment was not at all adapted to it. It was proper that the recuperative powers of the economy should concoct and eliminate the poison by their own selected emunctories. Too much officiousness on the part of the attendant practitioner interfered with these natural processes. Calomel, though sanctioned by the high authority of distinguished medical teachers, I found in my own experience to be pernicious. I cannot avoid placing it among the lædentia in the treatment of scarlet fever. Had I again to encounter a similar epidemic, I

should reject calomel from my therapeia. Gentle aperients are no doubt proper, but nothing of the kind should be given too early. At the commencement of this disease, there was often vast depression of the vires vitæ, and in this stage of the disease the perturbing practice was altogether inadmissible. Gentle stimulants, as sp. nit. dulc. cum tinct. lavend. with serpentaria, were the appropriate remedies. When the state of re-action had commenced, then the system, and not until then, would bear more energetic appliances.

I used the chlorine mixture, and I did think, with good effects. But I began with it so late in the epidemic, as to prevent my speaking with much certainty of its therapeutic value.

Of all the remedial articles employed by me, I witnessed the most decided good effects from emetics. When the age and constitutional vigor of the patient admitted, I preferred the tartarized antimony; where this article was contraindicated, I gave the ipecac, and sometimes repeated the latter several times. I cannot attach so much value as do some to local applications. No doubt they were of some service. Early cauterization of the internal fauces by the argent. nitrat. was as beneficial as any of this class of medicaments. The capsicum gargle, too, was sometimes apparently beneficial, as was also a diluted application of pyroligneous acid. It was a matter of some consequence, to have the internal fauces deterged by these or some other lotions, and external counter-irritation was not neglected; volatile liniment, sinapisms to the external fauces, and a domestic stimulating application was resorted to by some families. It consisted of a cataplasm of Indian meal and whiskey, applied warm to the throat. But in looking back to all these stimulating applications, I am impressed with the opinion that they were useless, if not pernicious. I must, however, in candor say, that of all these local applications, I saw more apparent good from an anile prescription than from any of them. This was a thin slice of bacon applied to the throat, and it was, perhaps, beneficial from its unirritating properties alone. A pledget of cotton, laid over the swollen glands, was beneficial on the same principle.

Of venesection in this disease, I cannot say much. I did not venture on its employment in very young subjects. But in every case in which I resorted to it, it was with decided benefit. I

believe that in no instance in which it was employed by me, was there *any congestion and suppuration of the lymphatic glands.* My own prejudices often forbade me the employment of the lancet, where I have since thought the patients would have been benefited had it been employed, and I have been deterred from its use by the opposition of parents. The singular efficacy of this remedial agent was witnessed in a case which I shall briefly relate:—

Case.—A lad, aged about twelve years, had a light attack of scarlatina. It was so slight that the parents did not think it necessary to call in medical aid. He had been over the disease five or six days, and was walking about the house. He was attacked in the night with convulsions, and a neighboring practitioner was called in, and very judiciously bled him. I saw him very early in the morning. When I arrived at the house, I found a great part of the neighborhood congregated in the entry to witness the death struggles of the boy. His attending physician told me that it was all over with him, but that I might go in and see him, as he lay in an adjoining room. When I entered I found the lad in dorsal decubitus—stretched out—the pupils of the eyes turned up into their sockets, showing frightfully the adnata; and the manner of respiration, and the whole manifestations of symptoms, such as to produce the impression that he was actually moribund. Great cerebral conjestion was evident, and the first impression on my mind was that effusion had taken place into the brain. When, however, I took hold of the boy's hand, and examined his pulse, I soon changed my opinion. There was a *remarkable fulness and tension of the artery, a pathological condition which I thought incompatible with effusion on the brain.* It struck me that had *effusion actually occurred, it would have relieved vascular congestion, and the pulse would have been found softer.* In consultation, I stated to the attending physician that, although he might startle at my proposition, I should advise bleeding the patient freely. He consented to the measure, and the father was called in, and the proposal made to him of bleeding his son—stating to him that his son might possibly die very soon. His answer was: "Gentlemen, do as you see proper; if my son dies, I shall attach no blame to you." The doctor tied up his arm, and took about sixteen ounces of blood. The pulse became

softer, and he removed the ligature from his arm, and applied the compress and bandage, as is usual. The boy still remained comatose, though the venesection had evidently been salutary.

On parting, I urged the doctor to tie up his patient's arm in a couple of hours, and bleed him again, if cerebral oppression were not very materially relieved. He did so, and took as much blood at this third bleeding as at the first, and in the afternoon the bandage slipped off his arm, and he bled as much as at any of the previous bleedings, before it was discovered and the vein secured. In the evening I saw him again, and not finding the cerebral embarrassment sufficiently removed, I took the liberty, in the absence of his physician, to cup him freely on the back of his neck and shoulders. I then prescribed vin. colch. et sp. nit. dulc. I saw him again on the third day. He was sitting up out of bed, and received me with the smile of health. His recovery was rapid and complete. He has never had a fit since.

The bleeding was in this case carried further than I ever before found necessary in a subject of this tender age—as much as four large bleedings in a little over twelve hours. This case presents much material for reflection; my limits, however, forbid me from enlarging upon it. I shall merely observe that I related the case to a medical friend, and at a subsequent interview he informed me that it had been instrumental in saving a patient of his in similar circumstances. His case was that of a child—the convulsions severe; and he bled him largely, and with the most striking good results.

With respect to the use of the lancet in scarlatina, pathological reasoning would lead to its adoption. Scarlatina is confessedly a congestive disease, and after the establishment of reaction, the lancet holds out as fair a promise to relieve the congested organs, and equalize excitement, as any other remedial agent. I cannot help, too, indorsing the opinion which Sydenham (I think) advances, that bloodletting proves beneficial by removing a portion of the poison from the blood—thus preventing the emunctories from being overtaxed in eliminating the remainder of the poison from the blood.

White House, N. J., *June*, 1855.

Scarlatina of 1844 *and* '45 *as it prevailed in Tewksbury and vicinity, Hunterdon County, N. J.* By J. HONEYMAN, M. D.

IT commenced in the autumn and continued to prevail till the following summer. Its greatest power was felt in the midst of winter. Cases were then not only more numerous, but of a severer grade. It pervaded nearly every family, and reached almost every individual in the same.

Causes.—It appeared to be induced by the operation of a specific contagion. I could trace it to this source in nearly every instance. Were we allowed to admit its propagation through the medium of clothing or fomites, as most English writers hold, perhaps every case might be attributed to specific contagion. The period of attack, after exposure, varied from a few hours to several days. Two parturient women caught it, sickened in 12 hours after delivery, and expired in less than 48 hours. It was complicated with and rather marked by peritoneal inflammation, presenting a combination of congestive scarlatina and puerperal peritonitis.

Varieties.—It occurred under the three usual varieties of simplex, anginosa, and maligna. Very few cases were of the first variety and limited to the skin. The great majority were of the anginose species. The fever and anginose affection generally progressed together, *pari passu*. Deglutition, though difficult, was never impracticable, but in one instance, the case of an adult, who lived eight days without swallowing even water, and without speaking except in whispers. On inspecting the fauces, the palate, uvula, and fauces were red and swollen, and when the local inflammation ran high, coagulable lymph was effused in distinct masses on the inflamed mucous membrane, resembling sloughs from ulcers. Actual sloughing was rare, and confined to a few fatal cases. The tongue was early covered with a thick cream-like coating, through which were seen projecting the enlarged red papillæ. The pulse was remarkably frequent, ranging in children from 160 to 200 per minute. The eruption was sometimes early in appearing, sometimes late, and visible after the throat affection was improving, and sometimes absent entirely. In adults, the eruption was absent, but the skin fre-

quently exhibited an inflammatory blushing state. A desquamation of the cuticle was common. Secondary attacks were occasional, the latter attack being confined to the throat, and never affecting the skin.

The disease was sometimes complicated with affections of the serous membranes. We witnessed it to fall on the arachnoid and pleura. At one period of the epidemic, the gastro-enteritic mucous membrane was untouched by it, and antimonials were borne well; at another period this texture was very irritable, and even symptoms of dysentery were clearly marked in two families. At another period, cough was a very constant accompaniment of the disease. Coryza generally attended fatal cases, yet fatality did not always succeed coryza. Death usually occurred before the fifth day, often on the third. In fatal cases the little patient was commonly attacked with a chill, the feet and legs remained cold, the eruption became of a dusky red, he would lie in a comatose state, breath quickly, the tonsils and throat swelled internally, and the parotid and submaxillary glands much swelled externally. Often before death, and immediately after death, the external swelling would exhibit a purplish hue, from gangrene. The eyes were dull and injected, deglutition difficult, coryza present, a troublesome rattling from mucus clogging up the air-passages, breath fetid, and teeth covered with brown sordes.

Sequelæ.—The most common sequel of the disease was dropsy. It varied in degree from slight œdema of the face and extremities to severe anasarca with effusion into the chest and abdomen. It generally began in less than a fortnight after desquamation. The utmost care did not sometimes prevent it. It was more common after slight than after severe cases, and probably arose from the action of cold on the very sensitive skin. Only three adults became decidedly dropsical, two of whom were obliged to travel, in cold damp weather, several miles during convalescence.

The little patient would proceed in convalescence to a certain point, when all at once he would become languid, lose his appetite, and become drowsy; the breathing would become hurried, the face and feet swell, the urine become scanty, nearly suppressed, resembling strong coffee in appearance, and frequently containing a dark red sediment, resembling the admixture of the red glo-

bules of the blood. Infiltration of the cellular texture would next occur, followed by effusion into the cavities. Another sequel was chronic enlargement of the cervical glands. In no instance did they terminate in suppuration, but in resolution. A third sequel was inflammation of the ear, ending in suppuration. In two instances, exfoliation of the mastoid process of the temporal bone succeeded suppuration, producing deafness of the corresponding ear.

Comparative Mortality.—I have witnessed the disease several times, spreading from contagion alone, unaccompanied by an epidemic state of the air, when it was comparatively mild and tractable. Scarcely a death occurred, and very little treatment was necessary. In this epidemic, in one neighborhood, just on the confines of my practice, out of the first eight cases five died, one of whom only I attended. Several families lost two, some three, and one four children. An experienced physician lost six out of the first 20 cases. In my own practice, of the first 200 cases, 5 died, averaging one in forty. This was about the proportion during the epidemic, except a few days during and succeeding a tremendous snowstorm, which for four days rendered the roads impassable. At this period, when nature had to contend single-handed against the disease, nearly one-half died. As regards the mortality from dropsical effusions, one death only occurred in upwards of fifty cases that required treatment. This was nearly the first case, and advanced insidiously to a fatal termination.

Treatment.—From observing the inutility of a mild treatment in the hands of others with whom the epidemic commenced, I was early led to adopt a vigorous plan. The first object aimed at was to equalize the excitement. The feet and legs were generally cold in severe cases. They were directed to be immersed in warm stimulating pediluvia, followed by sinapisms to the extremities. As soon as reaction was established and the pulse would permit, blood was drawn from the arm. A tense and corded pulse was not made the criterion for the use of the lancet, as in inflammation of the serous membranes. This state of the pulse never occurred in pure scarlatina anginosa, unless complicated with inflammation of the membranes of the brain, meningitis, or with pleurisy, a very rare combination. The propriety of bloodletting was determined on, far more by the evidences of

local engorgement of the throat, and especially of congestion of the brain, as shown by drowsiness, flushing of the face, and injection of the eyes, than by a full and hard pulse. In severe cases, this course was found essential to a safe termination, and in mild cases it tended to keep them mild throughout their course. Mercurial cathartics and their usual adjuncts, castor oil, senna, &c., followed venesection, and in mild cases superseded the use of the lancet entirely. Vermifuges were early and very successfully employed. Of these, spigelia was by far the most successful. In general, one copious bleeding sufficed. It was always carried *ad deliquium*. After free purging, topical bleeding was daily resorted to, sometimes by cupping the neck over the swollen cervical glands, and sometimes by scarifying the inflamed tonsils with the point of a lancet. Blisters were used in some instances, but with no satisfactory results; mild cases did not require them, and severe ones were not benefited by them. Stimulating liniments were often used, but with no marked effect. Gargles of different kinds, from slippery elm to cayenne pepper, were tried with doubtful efficacy. Emetics were not resorted to. At one period of the epidemic the great irritability of the gastro-enteritic mucous membrane forbade their use. It was observed, too, that spontaneous vomiting was rather prejudicial than otherwise. In the intervals between cathartic medicines, sp. nit. dulcis was given, or, what I preferred, the vin. colchi. The latter proved often laxative, and sedative, and was easily taken. Its use often superseded the necessity of direct cathartics. In no instance was salivation attempted, nor did it occur in my own practice. I saw in consultation, a boy ten years of age, who took repeated doses of calomel as a vermifuge at the close of an attack of scarlatina. His cheeks became gangrenous, and sloughed deeply, the maxillary bone was extensively inflamed, but did not become carious; hemorrhage took place daily from the gums, tongue, cheeks, nose, and at length from the ears. The blood became pale and thin, as in chlorosis. He fortunately recovered under the use of the chalybeates. His attack was followed by dropsy, notwithstanding the salivation, and required the usual treatment, under which he recovered.

Permit me here to detail a case. It occurred in my third child, then four and a half years old. The disease being fully esta-

blished, the throat was much swollen externally, and the fauces highly inflamed, the cheeks were of a crimson hue, the eyelids injected, and the child lay in a constant stupor, from which it was difficult to rouse him. Cathartics not affording any relief, he was bled *ad deliquium*. To effect this, about six ounces of blood were drawn. Immediately after the bleeding, which was in the evening, he improved so much that he talked with his mother for several hours. The next morning he continued better, but in the afternoon became worse. On the following morning he was again bled about six oz. During the day the throat was freely scarified, and cathartics and colchicum given. The next morning, the disease appearing stationary, it was thought proper to repeat the venesection and scarification. It was again carried *ad deliquium* (the patient being always in the erect position). He now improved through the day, but during the mother's absence a short time in the afternoon, the vein opened spontaneously, and a copious discharge of blood occurred. The child lost probably 22 oz., and recovered speedily and perfectly, without dropsy, and without any injury to the constitution.

Treatment of the Dropsy following Scarlatina.—As already observed, dropsy was a very common sequel, more especially of mild cases, and of cases treated mildly. The management of it was simple and very uniform. From observation as well as reading, I had been led to believe it inflammatory; that the kidneys were mainly in fault, being deranged in function, and having a tendency to derangement of structure. In every case there was great scarcity of urine, pain in the loins over the region of the kidneys, and pressure over these organs, and especially percussion, aggravated the pain very sensibly. Viewing the kidneys to be in a congested or sub-inflammatory state, I uniformly commenced the treatment by bloodletting from the arm. Diuretics were next given, and very generally with good effect. If however, the kidneys did not respond to their stimulus, cupping the loins was resorted to, and sometimes epispastics were applied to the same part. These never failed to prepare the way for the successful use of diuretics. Of these none answered so well as digitalis, and no preparation of digitalis so well as the watery infusion. In quantity one tablespoonful of the ordinary infusion was given four times a day to an adult, and never exceeded in quantity.

Cathartics were tried in various combinations, but with no satisfactory result. In this epidemic, digitalis after proper preparation by the lancet, and sometimes aided by cupping and blistering was just as much a specific as quinine ever was in my hands for intermittent fever.

In no case did the digitalis prove injurious. It seldom affected the pulse, sometimes caused vertigo, and in two or three days produced copious diuresis. No tonics were given after the evacuation of the water, but a low diet enjoined for a few days.

New Germantown, Co., N. J. *October* 27, 1846.

ART. IV.—*Ligatures of Arteries.*—By W. J. C. DUHAMEL, M. D.

HAVING been prompted by some degree of curiosity to investigate the application of various ligatures, and believing that different material exercises different influence upon the artery to which it is applied—I find from inquiry, in experiments made, that those most applicable in practice are—catgut, silk, prepared and crude flax, hempen threads, and hair.

The catgut when applied as a ligature, is, doubtless, the most strong and homogeneous. Experiments show that even in arteries of small diameter it has sufficient strength to compress and divide its proper coats, but it differs from other ligatures, as it does not always divide the internal wall at the moment the knot is formed. In some instances, the catgut was thought to have been absorbed, and in many instances it was found so much softened that little doubt could be entertained of its progressive absorption.

More experiments have been made with silk than with any other material, both in the manufactured and crude state, untwisted threads, &c., applying them not thicker than human hair; the only difference in the results was, that manufactured silk, left on an artery, lost its artificial color, while the unprepared maintained the color natural to it. When compared with catgut, silk ligatures produce much more irritation, and excite suppuration

more frequently, although in many cases simple adhesive inflammation alone was produced.

Like the catgut, they are first covered with plastic lymph, then connected with the cord remaining between the two extremities of the artery, or they lie bare between the layers of the common cellular tissue, or become encysted. If not thrown off, the silk may remain inert during life; yet in some cases it has been demonstrated that after a long time it becomes softened, and may be absorbed. No difference was found between slender ligatures of linen or hempen thread; they have been found no more irritating than silk. Of experiments made with black horsehair (single or double), the only difference of such from other ligatures is, that they preserve their physical properties unaltered, and still remain in the body innocuous; human hair likewise. The following table will show the result of the application of some 300 various ligatures and methods, and of the pathological conditions induced by them in arteries.

1. *Quality.*

Catgut	80
Silk	120
Thread	60
Hair	40

2. *Methods.*

Circular ligature	140
Loose ditto	70
Double ditto	45

3. *Animals Experimented upon.*

Dogs	65
Sheep	24
Goats	12
Calves	2
Horses	13
Asses	5
Rabbits	8

4. *Arteries.*

Carotids	110
Subclavians	32
Brachial	14
Iliac	19
Femoral	80

5. Time Left.

1 to 30 days	44
1 to 3 months	61
3 to 6 months	48
6 to 9 months	54
1 to 2 years	29
2 to 3 years	18

6. Result.

Catgut	80	disappeared	33	
		remained		47
Silk	120	disappeared	19	
		remained		101
Thread	60	disappeared	10	
		remained		50
Hair	40	disappeared	2	
		remained		38
			64	236

7. Effects in the 236 Ligatures which remained.

1st. Covered by lymphatics—cellular substance	29
2d. Attached to the cord between the ends of the artery	60
3d. In common cellular tissue	67
4th. Encysted	54
5th. Forming abscesses	26
	236

WASHINGTON, D. C., *June* 23, 1855.

ART. V.—*The Treatment of the Dysentery of the Northern & Middle States.* By AUGUSTUS K. GARDNER, M. D., Fellow of the New York Academy of Medicine, &c. &c.

I PROPOSE in this paper briefly to present my views of the treatment of an annual disease, which I think is generally far too actively and often injudiciously treated by the profession.

When a bone is broken, all that we can do is to put the fractured ends in coaptation, and thus let it quietly remain until nature unites the parts. If a muscle is cut through, the same treatment is adopted. If the throat is sore, stop talking. If the eye is inflamed, shut it up and cease to use it. Disease is particularly

dangerous in those organs where rest is impossible. If there be inflammation of the lungs or heart, organs which cannot cease from being in constant action, the disease is a grave one, and simply from this cause. We can, however, diminish the action of these organs somewhat, and in that lies the salvation of the patient.

Fortunately, in dysentery and in diseases of the bowels we have organs attacked where rest is possible; but, alas! the theory alluded to in the preceding paragraph is forgotten too often by the practitioner.

The medical skill cannot purge away acrid and pestilential matters from the bowels, and thus cure dysentery; neither with calomel can it produce alterative effects, healing the wounded intestine; nor will administered astringents pucker up the bleeding ulcer, and effect a cure. Medical skill can do but one simple but effectual thing. It can arrest the action of the bowel—it can prevent food, or any matter, from flowing over and stimulating the bowel to movement—it can prevent the raw, abraded surface of the intestine from rubbing against itself—it can give to the bowel the same quiet that it affords to the broken bone. The great, the indispensable, the *only successful treatment* of dysentery is to afford rest. Absolute, entire, and continued rest, as the alpha and omega of all practice in this disease, should be impressed upon the minds of every practitioner.

How is this rest to be obtained? Firstly, by clearing the stomach and bowels of their contents. Secondly, by putting nothing more into them. Thirdly, to suspend by medicines any irritative action that may be going on; and finally, having done this, trust in God and nature for the cure, which will rarely fail to bless such treatment.

First, by clearing the stomach and bowels of their contents, we take from them all cause of action. This may be well done by ten grains of blue pill, followed by ol. ricini.

Secondly, by putting nothing more into them. Starvation, entire absence from food and drink, with bodily rest, will of itself cure very many cases of severe dysentery. If your patient is unwilling to trust this treatment, approximate as nearly as possible. Prescribe the articles of food and drink, and the quantity. Nothing is better than arrowroot made with water, thin, without

wine or spirit, sweetened as desired—a tablespoonful every hour or half hour. One will not grow fat on this, but it will support life. My sister thus lived for six weeks in the midst of the cholera of '49, and yet survives to tell of it. This is both meat and drink. If the thirst be intolerable, ice in small pieces as rarely as possible, a half wineglass of iced soda-water every hour. As the patient improves, gradually increase the quantity, and exchange the gruels for chicken, beef, or other teas. More than this, nothing should be admitted into the stomach.

Thirdly, to suspend all action of the bowels. This is to be done by the recumbent position—that upon the back—not sitting in an arm-chair, or propped up in bed. Absolute bodily rest is of the utmost importance. All the medicine in the world, combined with rigid diet, is almost valueless in disease of this character, of any moment, while the patient is moving about, vainly attempting to half attend to business.

By simple bodily rest we may suspend the action of the bowels, so far as it is dependent upon the effects of gravitation or the excitements arising from locomotion.

But there is a further cause of the action of the bowels, viz. in the stimulus arising from the inflammatory condition of the intestine in its ordinary, natural, vermicular movements. The food, acrid secretions, or even the blood emitted from the inflamed surface, more or less decomposed, passing over the diseased portion or even the opposing sides of the intestine, irritate and excite to defecation. This is to be allayed by opiates. The best method, in my experience, is by local application. Starch and laudanum injections is an old and favorite method of administering it. There are several objections to this method—the irritation produced by the pipe of the syringe; by the bulk of the lavement; by the alcohol, in some cases, &c. A better method is by suppository, which I am in the habit of making as follows:—

℞.—Pulv. Opii, gr. ii;
Butr. Cacao, q. s.
Ft. supposit. no. i.

In this may be given tannic acid, acetate of lead, or any such medicines as may be desirable. If carefully inserted, even where

the tenesmus is severe, they will be retained, and soon quiet the bowel. My plan is to administer one after every passage, and I have never seen narcotism produced while following this safe direction. The suppository may frequently be given where opium by the mouth is inadmissible. A year since, I had an old lady of nearly 80, in whom a minute quantity of opium, as five drops of paregoric, or a grain of Dover's powder, produced intolerable itching. Every form of opium produced a like result, but she could bear a half grain of opium in suppository without any such symptoms, if not given oftener than every four or six hours.

Very much depends upon the method of making the suppositories. The butter of cocoa found in many shops is hardened by wax, so that it may be more easily used, but this adulteration defeats the very end intended by its use, viz: its speedy melting, and where the tenesmus is severe, will cause it to be thrown out before it becomes dissolved, and the medicinal ingredients brought in contact with the absorbents of the rectum.

Frequently they are thickened or enveloped with magnesia or powdered liquorice root, to their manifest detriment. They should be made without any foreign admixture, and enveloped, when made, in arrowroot. Frequently, in warm weather, when they are most needed, druggists complain of their inability to mould them. By placing a piece of ice upon the pill-plate, the butter is speedily as hard as desired.

Suppositories are particularly useful when the inflammation or ulceration is near the rectum; the opiate then is applied locally. If, however, it is perceived that the inflammation is higher up, it will be found necessary to give the opium internally. In that case, a grain every four hours will generally be abundantly sufficient.

These are the main features of the treatment of dysentery, so far as my experience goes. Vegetable and mineral astringents may be given as fancy may dictate. They are generally always given with opium in some form, and, as I think, have stolen some reputation from their associate. Chalk, on account of its insoluble nature, should not be persisted in. The nitro-muriatic acid I give as a lemonade, but I doubt whether in this climate, where the liver rarely sympathizes with the intestinal troubles, it is of

any advantage. It makes, however, an agreeable drink, and may be given without detriment.

General bleeding is rarely called for in this latitude, but where the attack comes on suddenly, with high febrile symptoms and evident local congestion, it will be called for. Leeches to the anus, where the tenesmus is great, or over any tender spots in the abdomen, in the early stage of the disease, with cataplasm sinapisms, &c., are frequently useful.

Calomel, except as a purgative in the commencement, or where there are icteric symptoms, I consider actually injurious. If the liver be stimulated by it, there will be undoubtedly bilious evacuations, which have the effect, in their passage, of irritating the inflamed intestine over which they pass, and producing no beneficial result—unless it be to unload the portal veins, or to have an alterative effect, which is merely to apply terms of doubtful signification to effects which we merely imagine to occur. In my opinion mercurials, except as simple mild cathartics, are totally inadmissible in dysentery, as is every other medicine for which you cannot give a satisfactory reason for its use.

One more much vaunted medicine I have used, without perceiving any benefit therefrom—the nitr. argenti; I have given it with a like want of success, both by mouth and per rectum.

If rest is the *sine qua non* in acute dysentery, in the chronic form it is especially called for. In the cases which I have seen of East India, Panama and Chagres type, some of very long standing and ten to twenty evacuations per diem, I have stopped the enormous eating, and the patients apparently robust and vigorous at times, who for months have attended to business on shore, or been engaged in more arduous occupation and exposures by sea, I have put upon their back, quieted the bowels by suppositories, prescribed light diet of farinaceous articles principally, and returning health has in every case crowned this treatment. In one aggravated case, where I had the benefit of the extended observation and careful judgment of Dr. J. M. Smith, of this city, the gentleman, entirely cured, as Captain of an East Indiaman, is again exposed to the danger of taking a complaint, from which he so narrowly escaped.

Rest, I repeat, is the great and only effectual and defensible treatment of dysentery.

New York, 141 East 13th St, July 1, 1855.

PROCEEDINGS OF MEDICAL SOCIETIES.

ART. VI.—*Extracts from the Minutes of the New York Pathological Society.* Specially reported for the New Jersey Medical Reporter, by E. LEE JONES, M. D., Secretary.

REGULAR MEETING, *May* 9, 1855.

Œdema of the Glottis.—Dr. CLARK presented for Dr. Macready, a specimen of *œdema of the glottis*, which occurred in Bellevue Hospital. When admitted, the patient (46 years old) suffered only from tympanitis; his system was much debilitated from want of good food, and exposure to the hardships of the past winter. There was no tenderness of the abdomen, no diarrhœa, no constipation; nothing, in fact, but the tympanitis. He was ordered to take by the house physician, aqua ammonia gtt. x in water. Mistaking his directions, it was administered undiluted—he called for water immediately, and complained of burning in the throat. He continued restless and moaning until 4 P. M. (5 hours after), when he was again seen by the physician, who found him sitting up in bed, laboring for breath. The thought of œdema glottidis at once was suggested as the difficulty. On introducing his finger into the throat, it felt soft and pulpy—no sacs or bags could however be felt. While consulting in regard to the case, in a distant part of the ward, with another physician, who, after an examination came to the same conclusion, the man ceased to breathe.

Autopsy.—On inspection of the parts after death, on all anterior to the epiglottis, considerable œdema existed; the edges of the openings of the larynx were swollen; and within, the larynx itself was almost completely closed. No irregularities in the way of bags or sacs existed, such as are most commonly observed in this disease. The pharynx was very red; the œdematous swellings not markedly so. The tympanitis was due to chronic tubercular peritonitis—it differed from most cases in there not being alternations of diarrhœa and constipation. In the lungs, diffuse tubercular matter existed, and four or five moderate tubercular infiltrations, contrary to the law of Louis, that tubercles are most abundant and most advanced in the lungs in patients over sixteen years of age.

Dr. JENKINS inquired how far topical applications might have proved of service in this case?

Dr. CLARK replied, that though many cases had occurred under his observation in hospital practice, he had never had the immediate treatment of one.

Dr. SAYRE suggested that œdema could always be detected by the eye more readily than by the finger, as the fluid can be crowded away by pressure.

Dr. CLARK observed that this case would not have been relieved by the operation proposed by Dr. Buck; it could, perhaps, have been relieved by puncturing with a curved needle.

Dr. FOSTER inquired if nitrate of silver might not have been of use?

Dr. CLARK thought not. The danger is not usually appreciated until a few minutes before death. Three of the cases with which he was familiar, died at night; nothing being known before the *autopsy*, as to the cause of death; in one, the effusion was consequent upon syphilitic ulceration of the fauces—and in the case operated upon by the lamented Dr. Ravenhill, four years since, at Bellevue, the man seemed as if he could not take a dozen more respirations. He scarified with an ordinary probe-pointed bistoury—the next day he was nearly as well as ever.

Fibrous Effusion into Bladder and Urethra.—Dr. CLARK next exhibited a

bladder, showing certain forms of inflammatory action when paralyzed, viz: fibrous effusion at the commencement of the urethra. It was a case of apoplexy—the urine escaped from the bladder at times mixed with blood—there was also found purulent matter when examined. The catheter when introduced gave a sensation as if passing at certain points along a roughened surface. This is explained by inspection of the urethra, which is covered at intervals by fibrous effusion.

Fibrous Degeneration of Kidneys.—Dr. CLARK next presented three *kidneys*, showing *fibrous degeneration*, their respective weights being 10½ oz., 3½ oz. and 2 oz. Microscopically they exhibited the same character; neither of them are fatty; the secreting cells in each are healthy; their surfaces slightly granular. In a strong light, on the smallest, with a lens magnifying seven diameters, can be seen an infinite number of papillary eminences covering the whole surface. These are not the granulations of Bright's disease, which are always of a yellow or grayish white color, these presenting the same color as that of the base. In Bright's disease they are irregular; these are rounded up, standing out half their diameter from the surface. They are in fact Malpighian bodies, left standing out from the surface of the kidney by the retraction of the other part of the organ. One of the kidneys is dotted over with *scarlet-colored spots;* which are composed of *crystalline hæmatoidine*—another is dotted over in its interior with an abundance of the black variety of hæmatoidine, so as to present a marked discoloration on section. He (Dr. C.) is not aware it has been before noticed in Bright's disease. Black vomit contains precisely the same material.

Dr. COCK inquired whether these specimens were not gradations of the same disease?

Dr. CLARK considered them as such.

Dr. SCHILLING suggested that they were similar to cirrhosis of the liver, which was large or small, according to the stage of the disease.

Melanosis of the Liver.—Dr. SAYRE presented a specimen of *Melanosis* of the *Liver*, removed from a gentleman sixty years of age. Eight years since, an oval tumor was first observed on the left temple, about the size of a small nut, movable under the finger, and unattended with pain. It slowly increased until 1851, when it was first seen by Dr. Sayre; it was then the size of a large egg. The only inconvenience occasioned by it was the difficulty of putting on his hat. He thought it was an ordinary encysted tumor, over the temporal muscle, but on cutting down upon it, it was situated below the muscle, and consisted of a *perfectly black jelly-like* mass covered with a thin pellicle—it extended below the zygoma, and completely filled the temporal fossa. It was easily removed. The wound healed by the first intention. The tumor Dr. Sayre considered to be *melanotic cancer* in its nature. But it was destroyed before a microscopic examination could be made. His general health continued perfectly good, and he attended actively to his business (that of a builder) for three years and more, and he (Dr. S.) began to think his first impressions, as to the nature of the mass, were erroneous, as no return in any of the internal organs had occurred. About this time, while carrying a large and long board across the street upon his shoulder, in a severe gale of wind, he was suddenly *twisted* around, and, to prevent himself from being prostrated by the force of the wind, he was compelled to brace the muscles of his back and limbs with great energy; while in this position he was seized with acute pain in the back and right side, over the region of the liver; where, to use his own words, he "distinctly heard something crack, and felt it give way." He was brought home faint and in great pain. When examined by Dr. Sayre, a day or two after the accident, nothing unnatural could be detected. After remaining quiet a few weeks, he gradually resumed his business, but never seemed so well or active. In November last, six months after the accident, Dr. S. was called in on account of obstinate vomiting, and on examination a nodulated, hardened mass was distinctly felt upon the right lobe of the liver,

which extended some distance below the ribs. He informed his son, a physician, that he feared his first impressions, in regard to the nature of the tumor removed from his temple three and a half years since, were correct, and the disease had returned in the liver. The tumor continued to increase rather slowly for one or two months; but its progress was so rapid during the last three months, that its enlargement was clearly perceptible at each weekly visit. Three weeks ago, it could be felt crowding down into the right iliac fossa, and very near to the crest of the ilium on the left side. The thorax was distended laterally to its fullest capacity, and the lungs forced upwards, so that respiration could not be heard below the fourth rib, on the anterior and lateral parts of the chest. He had not been able to assume the recumbent position for some weeks. On the 2d May, a severe attack of vomiting occurred, and he rapidly began to sink, and died on the 3d at 4 A. M. The *post-mortem* examination was made on the 4th inst., and 42 hours after death, assisted by Drs. Thebaud and Lattimore—the body having been preserved in ice for the last 24 hours. *External appearance.*—Face much emaciated—legs, penis and scrotum, œdematous. On opening the cadaver and removing the sternum, the diaphragm was found crowded above the fourth rib, and only 3½ inches below the clavicle; thus compressing the lungs and heart into a very small space. The right and left iliac fossæ were completely filled with tumors from the two lobes of the liver; the lower border of the fissure of the liver was below the umbilicus, and the intestines were crowded into the small, triangular space between that and the pubis. The liver weighed, immediately after removal, 23 pounds.

Weight, 23 pounds. *Measurement*, vertical diameter, right lobe, 17 inches; vertical diameter, left lobe, 16½ inches; vertical diameter at the fissure, 8½ inches; transverse diameter at the middle, 20 inches; transverse diameter at the base, 22 inches; oblique diameter from right to left, 23½ inches; oblique diameter from left to right, 20½; greatest thickness, 4⅝ inches.

Poisonous Effect of Oxalic Acid.—Dr. Finnell presented a *stomach* removed from a man, eighteen years old, who took an unknown quantity of *oxalic acid;* it was much contracted, of an intense red color. The lungs and brain were much congested.

Hypertrophy of Heart.—Dr. Finnell next exhibited a *hypertrophied heart* weighing 14 oz., with thickening of the mitral valve. Patient died suddenly in the street, and was not known to have labored under disease of the heart.

E. LEE JONES, M. D.
Secretary.

Regular Meeting, *May* 23, 1855.

Tumors of Liver, &c.—Dr. Griscom presented a specimen of *tumors* of the *liver*, removed from a man 29 years of age. The patient of robust constitution, general good health, was admitted into the City Hospital, with ascites, attributed to cirrhosis, on the 24th April last. He has been at one time somewhat intemperate. Five weeks ago he first noticed abdominal dropsy, which did not at the time cause him any inconvenience, nor compel him to discontinue labor; two weeks before admission he also noticed some œdema of the lower extremities. No pain whatever preceded these symptoms, nor any derangement of his general health, with the exception of a somewhat troublesome diarrhœa. When admitted the belly was much distended, the superficial veins enlarged—but to a less degree than is common in cirrhosis of the liver. Dulness over the hepatic region somewhat less extensive than natural; belly evenly distended, but tympanitic over the whole central portion, where (the patient lying on his back) no fluctuation could be detected. Over the lateral portions were dulness and fluctuation, changing with position, the quantity of fluid not appearing very considerable. The tension of abdominal parietes occasioned marked distress in breathing. The feet and legs were considerably œdematous, pitting on pressure. The quantity of

urine passed was greater than natural, normal in appearance, containing no albumen, depositing no lithates. Specific gravity, 1.021. There was diarrhœa, bowels moving four or five times in twenty-four hours; passages thin, watery, light-colored, without tenesmus. Pulse 96, fair strength; tongue moist, clean; skin natural. He complained of no pain, simply of the distress and uneasiness occasioned by distension—the degree of which varies from day to day. The quantity of water was from three to four quarts in twenty-four hours. No diuretics were employed.

On the 4th of May paracentesis abdominis was performed. On introduction of the canula, only a small quantity of fluid escaped; the orifice of the tube being obstructed, an elastic catheter was introduced through the canula, by which about three quarts of remarkably clear serum was withdrawn. He was somewhat relieved by the operation. Two days after, on the morning of the 6th, respiration short, pulse accelerated, friction sound at base of right lung—laterally and anteriorly; diaphoretic ordered. The next morning, pulse 108, hard, moderate fulness; respiration 30; skin natural in temperature, moist, expression less indicative of suffering. Is more comfortable, and complains less of pain in the side; of no pain over abdomen, except at the point of operation. Percussion anteriorly natural over both sides; apex of heart beats below fifth rib, and four and a half inches to left of sternum. Posteriorly, percussion over right side dull, up to a point two inches below the posterior angle of scapula, especially over the lower half of the lung, where dulness is complete. Over left side percussion natural; over upper part of right lung posteriorly respiratory sounds natural, becoming more indistinct about commencement of lower half; at the lower part of lung respiratory sound almost entirely absent, and laterally and anteriorly is heard a distinct, dry, friction sound, accompanying inspiration and expiration. Vocal sounds ægophonic. Over left lung distinct mucous râles. Expectoration very slight, not characteristic of pneumonia or bronchitis.

May 13. From this time onward there was no improvement in the patient's general condition; the pulse ranged from 96 to 112, the same in character; the dyspnœa increased, and was caused almost entirely by the great distension of the abdomen; his rest was bad, change of position affording little relief; appetite poor, the stomach with difficulty retaining food; the bowels at times loose; and strength slowly failing. These conditions were met by palliatives and support. He died on the 18th.

Autopsy.—On opening the chest, the whole right side was found to be full of serous fluid, containing but a small quantity of fibrin. No deposit of false membrane upon the surface of lung or pleura. The right lung small, collapsed, not adherent to ribs, but forced towards the spine, and floating in the serous fluid; of a dark-gray color, non-crepitant, except at the apex, containing no tubercles nor cancerous masses, only several calcareous bodies. Left lung crepitant, paler than natural, free from tubercles, but containing several calcareous masses. Heart to left of natural position, but healthy. Scattered over the inner surface of pleura were quantities of large, firm, white bodies, covering the pleura, lining the ribs, diaphragm, and mediastinum of right side. There were none of these found on the left side. *Liver* about natural size, very firm and hard, and scattered over its surface were found a number of hard, white nodules, from the size of a pea up to an inch in diameter, embedded in the liver; and, on section, these were found abundantly scattered through that organ, appearing to be of a cancerous nature. The color of liver a pale red, mottled with white or gray points; its weight, 4 lbs. 12 oz. On opening the peritoneum there was no escape of gas, no fibrinous deposit; considerable fluid within the cavity. The stomach and intestines large, and enormously distended with gas, lying in such manner that the stomach, colon, and one convolution of small intestine form one even convexity. At the angle formed by the transverse and ascending colons, pressing firmly against the ascending colon, which lay

partly posterior to it, and against the liver at the transverse fissure, caved in by the right lobe of the liver and short ribs; adherent to the liver, and the lateral and posterior abdominal muscles and to the colon, through the attachments of its investing membrane, and having its true point of attachment to the mesentery, the divergent lines of which could be distinctly made out at its inner posterior side, was found an *enormous tumor*. It was firm, hard, elastic and cartilaginous to the feel and the knife; somewhat nodulated; surface pearly white, smooth and polished. Weight, 2 lbs. 8 oz. (Case in full in *Archives.*)

Dr. Clark remarked, that the large tumor appeared to be fibrous in character; the masses on the pleura he thought were cancerous. If, on microscopic examination, the one should prove to be fibrous, and the other cancerous, it was interesting and seemed to imply that different kinds of tumors were governed by their own special laws, though situated in close proximity. It was rather unusual that fibrous and cancerous tumors occurred in the same persons.

Dr. Jenkins remembered having seen colloid cancer in the ovaries, and a fibrous tumor in the uterus.

Hypertrophy of Heart.—Dr. Sewell presented a specimen of *eccentric hypertrophy* of the heart, removed from a man 64 years old. He had been attended for about a year. When first visited, he had much dyspnœa at times, increased on exertion, but was able to work. A bellows-murmur was then perceptible. Three weeks since, anasarca was first observed, and rapidly increased until his death. During this time he suffered constantly and intensely from dyspnœa, and was unable to sleep more than fifteen minutes at a time. As soon as he was fairly asleep, he would start up with a strong sense of impending suffocation. The most comfortable position was leaning forward and supporting himself on two chairs. He never had rheumatism, cough, or bloody expectoration.

Post-mortem sixteen hours after death.—No rigor mortis. Temperature of trunk not far from that of health. Lungs somewhat congested; considerable effusion in pleural cavity; no adhesions to pericardium, which contained not more than half an ounce of fluid, and was entirely smooth and healthy everywhere. Heart hypertrophied; aortic valves thickened; atheromatous deposit abundant; right auricle greatly distended, in parts very thin; valves of right side healthy; weight 18 oz.; kidneys of natural size; beneath peritoneal coat numerous cysts, about the size of a pea, which contained a yellowish fluid; and within one of the kidneys was a cyst of the size of a marble. Dr. Sewell asked for an explanation of the continuance of the natural temperature of the body.

In answer to the inquiry of Dr. S., as to the explanation of the continuance of the temperature of the body, Dr. Clark referred to the remarks made by him when the subject of cholera was under discussion; and, as his remarks were not reported, he would, with the consent of the Society, repeat them. As we know, he observed, that, in inferior animals, when the cerebral nervous system dies, the reflex system often remains in activity for hours after; there is no violence in the supposition that the sympathetic system may survive both the others, and as this presides over the circulation, and is distributed to the capillary vessels everywhere, it might be supposed that some changes, regarded as vital, may take place after the signs of general death had existed for some time. Among these, it is easiest to suppose that chemical action, which produces the animal temperature may be prominent. If it be objected to this view, that, as the respiration has ceased, there is no new supply of oxygen, it may be borne in mind that the cooling agents are much diminished by that very suspension of the respiration; and, that, therefore, the oxygen already in the system may produce more apparent heat than during life. This view derives support from the fact that, in the bodies of persons dying of cholera, and sometimes of other diseases, it is evident that

the reflex nervous system does not die with the cerebral, since muscular movements are excited on stimulation for hours after apparent death. Also, a fact which appears to be well established, that those bodies in which this maintenance of animal temperature is observed, the process of putrefaction is unusually slow.

A Case of Extensive Disease.—Dr. CLARK presented a specimen of *waxy liver*, the *track* of a *sinus* from the *pleural* cavity of the right side to the *umbilicus; secondary abscesses* of the lungs and *bronchial* glands; no *scrofulous predisposition;* no *syphilis*, or mercurial influence; adhesions of the lungs to the diaphragm; probably old pleuritic abscess; no dropsy. The patient, Catharine O'Malley, Ireland, æt. 38, was admitted into Bellevue Hospital in October, 1853, and entered on the *ward book* (as informed by Dr. CRAIG, House Physician at the time of her admission), as "pregnant, having phthisis and umbilical abscess." She complained much of pain in the side and chest; she was delivered October 29; child weighed 4½ lbs., and died in January, 1854; she does not seem to have any hereditary tendency to tubercles; has had cough for three years, and has expectorated thick, purulent matter, occasionally stained with blood; night-sweats at times. The fistula is known to have existed for one year and two months, with slight discharge of pus. Has had no swellings, or other disease of joints or lymphatic glands; denies ever having had syphilis, or ever taking mercury to any extent; but of this, she would not be likely to be well informed; she had no dropsical effusion in the abdomen during life, and only about a pint of serum was found after death. She has had lately some swelling of the feet, perhaps for some time; urine not examined; died, after suffering from the above and sore mouth, May, 1855. The hospital record says, she had been four times pregnant; she was never married. It is now more than probable that her statement as to never having syphilis is not true. Four pregnancies in an unmarried woman implies risk.

Post-mortem Examination.—The *lungs* contained a great number of white spots, rounded, varying in size from that of No. 1 shot to that of a pea; some clustered, some single. Each of these spots, when cut into, discharges a little whitish pus; they occurred in both lungs, and equally in the different lobes. In the bronchial glands, the deposits of pus were much larger, some of them containing half a drachm. At the base of the left lung, near the median line, were two irregular, fleshy-looking masses or tumors, one as large as the last joint of the thumb, the other twice as large, which, when cut into, were found filled with pus. These lay between the lung and diaphragm, anterior to the œsophagus. Over the *spleen* were scattered yellowish-white spots, which had wholly the appearance of tubercles, but Dr. SANDS reports that they contain and are made up of inspissated pus. A few other purulent deposits were found in different parts; the lungs were adherent to the diaphragm on both sides firmly. On the right side, the adhesion was so intimate in all the anterior half of the diaphragm as to render the separation impossible, except by the knife. At the anterior and inner angle of this space, commenced a sinus, which had thickened, cartilaginous walls, penetrating the diaphragm, running between the liver and inner face of the diaphragm to the lower edge of the liver, then by a membranous channel to the umbilicus, when it opened externally. This sinus commenced in a cavity of moderate size, at the lower and anterior portion of the right lung; whether wholly pleural, it is not now easy to ascertain. The adhesions of the lung in the neighborhood of this cavity were very strong.

These appearances suggest the idea that, some time ago, the woman had pleurisy with purulent effusion; that the pus had forced a way for its escape through the diaphragm to the umbilicus; that adhesions followed this evacuation, and that these adhesions, except when kept up by the irritation of the sinus have already broken down. The *liver* had undergone material changes. Considerably enlarged, plump, its edges rounded, weight about seven lbs.; it was a good specimen of the waxy or scrofulous liver. On section, it had nothing

of the usual hepatic appearance, but was smooth, showing no vessels, mottled by alternations of reddish-yellow and brownish portions. It had the appearance of wax, or of a section of sun-fish; it was not very firm; it was waxy degeneration not yet complete. On *microscopic examination* the brown portions showed no cells but such as are peculiar to the waxy liver; the yellowish parts contained these cells, and also some of the normal hepatic cells, a portion of which were moderately fatty. Adhesions had taken place on every side of the liver; the diaphragm, anteriorly and above, seemed, by the growth of the liver, to have been stretched downward upon it. The intestines and stomach were so attached below, that they seemed an appendage to the liver, and required careful dissection to separate them. The kidneys had the color of Bright's disease, weighing together fifteen ounces; the cells were moderately fatty, and the fibres were increased.

Tubercular Cavities in Lung, without Cough.—Dr. CLARK then exhibited a specimen of *lungs* much affected with *tuberculosis;* a *cavity* at the top of each; *no cough; delirium tremens; fatty liver;* no tuberculous cachexia.

These lungs (the inferior lobe of each removed), show cavities as large as a butternut in one, and as large as a hen's egg in the other, lined by a false membrane. The whole organ, on each side, was pretty heavily laden with tubercular deposit. In the upper lobe in each, about the cavity, are abundant large miliary deposits, not softened; in the middle lobe of the right, considerable masses, softened in the centres, so as to leave small cavities, varying from the size of a small pea to that of a bean; in each of the inferior lobes, there were numerous grains of tubercles, as large as a double buck-shot, not softened; the left upper lobe was, at the time of removal, decidedly heavy from tubercular deposit; not less than three times its natural weight. The other lobes are greatly increased in weight; yet this woman was under observation eighteen days, and was not known to cough during that time.

She was about 30 years old, and was admitted into Bellevue Hospital on the 11th of last month. Her history is unsatisfactory; she confessed she had been freely drinking; she was a large, stout woman, probably weighing 160 lbs. Moved, at the time of admission, in a nervous, irregular way, and did not remember much of her antecedents. Her dingy hue induced Dr. C. to examine the liver; it was large, descending to the level of the umbilicus, smooth on its surface, and regular in its outline; it was considered fatty; she slept but little the first night, and the third day after admission was fully delirious; the delirium was obstinate, and continued for ten days, when she fell into a typhoid state, with noiseless, speechless dementia, and in this condition died, on the eighteenth day after admission. The treatment consisted of opium, in moderate doses, food, and laxatives; and, in the typhoid state, stimulants. *Post-mortem examination* revealed nothing of importance, beyond a fatty state of the liver; this organ weighing seven lbs., the condition of the lungs above described; the intestines much inflated, but not inflamed; a slight yellow stain of all the tissues. The *brain* was carefully examined, but, beyond a very moderate serous effusion on the surface under the arachnoid, a couple of drachms of serum in each lateral ventricle, a blanched appearance of the choroid plexus, considerable punctate redness on section, and white lines along the borders of the larger vessels on the surface of the organ, nothing was found.

Congenital Disease of Heart.—Dr. CLARK next presented a specimen, showing an *extraordinary congenital foramen* in the *auricular septum*. Hypertrophy, with dilatation of the *right ventricle*. Some disease of the pulmonary valves; also of the mitral; aorta small; pulmonary large. The *woman attained* the age of 49, and had *enjoyed tolerable health*. Rosanna Cole, Germany, aged 49, was admitted into Bellevue Hospital about the 1st of May. She earned her living by making paper boxes in a match factory, and had pursued her occupation till within a few months of her admission. At the time of her entrance in the hospital, she labored for breath, her countenance was almost

purple. She sat up in bed, because she could not breathe lying down. Her intellect was obtuse, and her account of herself confused and contradictory. She had not been a hard drinker; five years ago, she had rheumatism slightly; does not know how long her heart has troubled her, but had palpitations seven years before that time.

Physical Examination.—Apex of the heart is felt six inches to the left of the median line, and nearer the axilla than its proper level; some prominence of the præcordial space; the contractions of the heart and pulse were rather feeble and irregular; a murmur was heard, at times, over about the middle region of the enlarged præcordial space, feeble; there was indistinct pulsation in the veins of the neck; the lungs were loaded with bronchial mucus, giving a great variety of râles over the whole chest, and, in the region of the heart, so loud as to obscure the heart sounds altogether; bronchitis; she died ten days after admission.

Post mortem.—The *heart* weighed twenty-one ounces. The right ventricle was greatly dilated, so that it would hold from eight to twelve ounces of fluid. The walls were much thickened, so that this cavity was mistaken by several physicians present for the left ventricle. The pectini muscles were greatly enlarged, also the fleshy columns, but to a less extent; the tricuspid valve appeared to be healthy; the pulmonary valves seemed to be sufficient, but were irregularly thickened by a patchy, fibrinous deposit on their inner surface, the posterior more loaded than the rest, though none were healthy. This deposit was most abundant on the inferior half of the valves; mitral valve warty, hard, and thickened by deposit of the same material. Whether it was sufficient, was uncertain.

In the inferior portion of the *auricular septum*, was an immense *congenital opening*, permitting free communication between the auricles, without the least attempt to form a valve. This opening began at the base of the mitral valve below, and extended upward into the septum an inch and a quarter. Being nearly round, its transverse diameter was also 1¼ inch. The edges were perfectly rounded and fleshy, giving every evidence of being an original defect in the formation of the heart. The lower half inch of the septum, as it ends in the upper border of the foramen, is covered with a layer of fibrous membrane, organized, and firmly adherent. The foramen ovale, ¾ inch above the opening, is closed as it commonly is in the adult heart; left ventricle was of normal size, the walls slightly hypertrophied; the aortic valves were perfectly healthy and sufficient; the aorta was small, measuring, when pressed down flat, exactly one inch across; the pulmonary artery large; when treated in the same way, it measured one inch and three-quarters, though at the valves it is barely over an inch.

Some of the following items of history have been obtained since the patient's death: She had enjoyed tolerable health up to about a year ago, and had been of blue color, so say her step-daughters, who lived with her. About a year ago, she began to find that she could no longer lie down in bed. Still, she continued her work until a month since, when she began to cough, have difficult breathing, became blue in the face, and her feet swelled. These symptoms all remained, and increased till her death.

Uterine Hydatids.—Dr. LIVINGSTON presented a specimen of *uterine hydatids*. At about 3 P. M., on Saturday last, he was summoned in haste to see Mrs. M'G., of 32d Street. On his way to the house, he learned from her husband, that she supposed herself to be some four or five months advanced in pregnancy, and that during the last six weeks she had suffered repeated attacks of hemorrhage; but her physician, regarding it as only a disposition to miscarriage, treated it accordingly. About an hour previous she was attacked with a very violent and alarming hemorrhage, which was prostrating her very fast. Upon reaching the house she was found reclining upon a couch, soaked in blood; a large pool upon the floor and a chamber vessel more than half filled. She was much exhausted, pulse scarcely perceptible,

skin cold and clammy, features pallid and thirst intense. It was with the greatest difficulty she was induced to be removed to a bed, so great was her dread of the slightest movement, lest it should cause a return of the hemorrhage. On examination, the uterus was found enlarged to about the normal size of a five months' pregnancy. The os was slightly patulous. She had never felt fœtal life, and he (Dr. L.) was unable to make out the presence of a fœtus. She was ordered milk punch with a raw egg beat up in it, and as the hemorrhage had not entirely ceased, the vagina was plugged. She was visited again at about 9 in the evening. Her strength had come up finely. The hemorrhage was completely arrested, and, for the last hour, regular pains had occurred until now they were quite severe. At her urgent entreaty the tampon was removed. The os was now dilated so as to admit the point of the index finger, and as the true nature of the case was by this time very clear, by means of a small scoop, and after a labor of more than an hour, he succeeded in emptying the uterus of more than two quarts of hydatids. The patient is now (fifth day) convalescent. The principal interest in this case is, that the adventitious mass, contained a larger portion of adipose matter, and was much more firmly adherent to the lining membrane of the uterus, than is usually found to exist in such cases. It may also be stated that the patient suffered for a long time from injuries received in an instrumental delivery some two years since. She says that she has never been well since that time.

Enlarged Testicle.—Dr. FINNELL presented a *testicle*, weighing seven pounds, removed by him from a gentleman 70 years of age, of robust constitution. Its growth was first observed twelve years since, and apparently commenced in the cord on the left side. For the last six months the lower portion of the mass has been rapidly increasing. He has never experienced any pain or other inconvenience, than that occasioned by its size and weight. It is probably cancerous in its nature.

Dr. WILLARD PARKER remarked that two kinds of tumors are observed in these parts—those in which the testicle is first involved and is malignant in its nature, and those in which the disease commences in the cord, leaving the testicle free. Some twelve years ago he removed a mass weighing fourteen pounds, the cord being the seat of disease, the testicle itself not being implicated. Six months after there was a return of the disease on the stem of the cord, and the reproduced growth extended under the peritoneum. He operated again, and the patient has remained well ever since. He removed a mass from a patient in Bellevue Hospital—in this case the testicle was not diseased, the cord only—the tumor weighed three and a half pounds.

Dr. HOFFMAN removed a similar mass at the City Hospital, weighing six or seven pounds. The testicle (he thinks) was not involved. When the disease commences in the testicle, he had never seen the patient live longer than one and a half years—it does no good to operate, the disease recurs in other parts of the body. He never knew a case, where the testicle was implicated, to continue so long as the one before the Society.

CAMDEN Co., N. J.—The District Medical Society of Camden County held its annual meeting in the City of Camden, June 19th, 1855. Dr. WOODRUFF presiding. After the Society had disposed of the proper previous business, Dr. MULFORD, the Chairman of the Standing Committee, read a report upon the diseases which had prevailed in the county during the past year. Upon motion, the thanks of the Society were tendered to Dr. MULFORD for his able Report, and it was directed that it should be forwarded to the *N. J. Medical Reporter*, for publication. A discussion followed, in relation to certain matters alluded to in the report, viz: the tendency of intermittent and remittent fevers, of malarious origin, to assume a typhoid form, and as to what distinction was to be made between such *typhoid forms* of fever and *genuine typhoid* or *enteric fever*. The delegates to the State Medical Society and to the Ameri-

can Medical Association having made their reports, the President, Dr. Woodruff, delivered an admirable address upon the subject of Oxide of Silver as a Medicinal Agent.

The election of officers being next in order, the following gentlemen were appointed: *President*, Dr. Snowden; *V. President*, Dr. B. Hendry; *Secretary and Treasurer*, Dr. Dean; *Standing Committee*, Drs. Cooper, Stout and Dean. Dr. Cooper and Dr. Woodruff were appointed Delegates to the American Medical Association, to meet at Detroit, Mich., in May, 1856. Dr. Snowden, Dr. Stout, Dr. B. Hendry and Dr. Birdsell, were appointed the Delegates to the State Medical Society. The name of Dr. Bartholemew was stricken off the list of members, it being understood that he had openly avowed his intention of practising homœopathy, farther connection with the Society under such circumstances being impossible. On motion, it was directed that an abstract of the proceedings of the Society should be furnished to the *N. J. Medical Reporter* for publication, along with the report of the Standing Committee.

RICHARD C. DEAN,
Secretary.

Camden, *June 20th*, 1855.

*** We shall endeavor to make room in a future number for extracts from the report of the Standing Committee. Will not the President furnish us with a copy of his address, for publication? [Ed. N. J. Med. Rep.]

Hunterdon Co., N. J.—The annual meeting of this Society was held at Flemington, May 8, 1855. Drs. Leavitt and J. A. Gray were unanimously elected members. Dr. W. A. Hough was proposed for membership. Officers were elected as follows: *President*, Dr. John Blane; *V. President*, A. S. Clark; *Treasurer*, Dr. John F. Schenck; *Secretary*, Dr. John A. Gray. A resolution was passed recommending the *Reporter* to the support of the members. At a special meeting of the Society, held at Flemington, June 19th, the following resolution was passed unanimously: *Resolved*, That we regard the resolution offered by Dr. J. H. Phillips, and passed by the Medical Society of New Jersey at their annual meeting, entirely uncalled for, and calculated to injure the professional character of Dr. John F. Schenck, in whose legal acquirements and credentials we have always had the utmost confidence; and also, we regard that resolution as unjustly reflecting upon Drs. Lilly and Schenck, highly esteemed and beloved members of this Society, and that our delegates be instructed to have that matter fully investigated, and that act rendered null and void.

EDITORIAL.

MEDICAL PROGRESS.

The Stethoscope v. *Professor Wellford.*

THE new editors of the *Stethoscope* have signalled their advent by admitting into its columns an anonymous and uncalled for personal attack on Dr. Wellford, and that, too, over our shoulders.

The May number of the REPORTER contained an article on the American Medical Association, which referred favorably to Dr. Wellford's address before the Association, at New York, in 1853. The doctrines of that address were so pleasing to the members of the Association then and there present, that a copy of it was requested for publication in the *Transactions*—the first address, we believe, which received that honor.

The ostensible ground of the *Stethoscope's* attack on Dr. Wellford, is the failure of the medical profession in general, and of the Medical College of Virginia in particular, to come immediately up to a standard which had been recommended at several meetings of the Association, and supported on two or three public occasions by Dr. Wellford.

But why the *Stethoscope* should hold Dr. Wellford responsible for what it considers a lack on the part of the profession, we cannot conceive; nor can we see the justice of holding *any* one man responsible for the short-coming of the *great body* of the profession. The fact is, this matter of medical progress, is a target against which many a connoisseur and croaker tilts his lance, for no better reason than Herod had for ordering the slaughter of the distinguished men of his realm at his death.

If the *Stethoscope* wishes to advance the cause of medical progress in Virginia, or elsewhere, splenetic outbursts against the Medical College of Virginia, or one of its professors, is certainly not the best way of accomplishing the object. Much better take hold with that college and its professors in the good work to which they have nobly put their hands, and render it that support which *every* movement, however seemingly unimportant, on the part of our medical schools that savors of progress, has a right to expect at the hands of an independent medical press.

We would respectfully remind our confreres that there are amenities and courtesies in editorial life, and that the lack of these, toward individual members of the profession, or attacks on medical schools, are no evidence of independence.

We are sorry, if personal feelings, aroused by disappointed aspirations, have had anything to do with the course of the anonymous writer in the *Stethoscope*. The editors or proprietors of that Journal cannot afford to place themselves under any such influences, besides their being wholly unbecoming the *independent* position which the *Stethoscope* claims to hold.

As to medical progress, we believe that the Medical College of Virginia, and indeed *all* our medical colleges, and the profession generally, *are* making steady and sure progress, despite the croaking of some of our contemporaries, and we attribute much of this progress to the influence of the American Medical Association. That this progress may continue, and that it may receive the cordial support of the periodical literature of the profession, is our earnest hope.

Hiccough.—The *Dublin Medical Press* recommends as a specific for this troublesome affection, the internal use of chloroform in small doses. The dose should be repeated as often as the hiccough returns, and two or three appeals to the remedy may be necessary.—*Virg. Med. and Surg. Journal.*

A simple, and an efficacious remedy for *ordinary* cases of hiccough, is, *the elevation of the arms over the head, reaching* as high as possible with both arms, until a few spasms have been omitted. We have never known this simple remedy to fail.

Gum Mezquite.—In our April number we copied an article on this native gum, which is proposed as a substitute for gum Arabic. We have recently received a specimen of the gum from Dr. G. E. Bourford, of Fort Smith, Arkansas. It has very much the appearance of the gum senegal of the shops, and with a little care in selecting the best portions, there is no doubt but it would make a very fair substitute for the foreign gums. It is represented to exist in inexhaustible quantities on the vast plains that lie eastward of the Rocky Mountain range, and will probably be a valuable source of revenue to the States and Territories existing, or in embryo, in those regions. We remember, some years ago, to have heard a Cherokee hunter speak of the great abundance and variety of a species of "wild plum" which grew on those plains, and think it probable that this gum is the product of the tree he attempted to describe to us.

☞ One more number will complete our series of articles on the History of the American Medical Association. The portrait of Dr. Knight, President of the Association for 1853, appeared in the *Reporter* for January, 1854, being the first of the series of which eight have been published. The ninth, Dr. Pope, of St. Louis, will appear in our next.

☞ Our apology for lack of editorial matter may be found in the preceding pages.

CIRCULAR.

To the Medical Faculty of New Jersey.

We would call the special attention of the District Medical Societies, and the profession generally to the following circular of Dr. Smith.

The intelligent physician is aware of the importance of the history of epidemics, of the influences which cause them, and the means by which their ravages are checked. It is to be hoped, therefore, that the profession of New Jersey will furnish their Reporter with facts, that he can make the foundation for a report to the American Medical Association next May, that will be creditable to the State.—*Ed. N. J. Med. Rep.*

The undersigned having been appointed by the American Medical Association at its late meeting in Philadelphia, "Special Committee for New Jersey, to report upon the Medical Topography, epidemic diseases, and most successful treatment thereof," begs leave to call the attention of his professional brethren in the State to the subject, and respectfully asks of them information, such as will enable him to make a report next May at Detroit.

It is desirable to have the latitude, longitude, and altitude above the ocean, of each county, and, if practicable, township, in the State, its geological formation, soil, and productions; the character of its water, the effect of improvements on the health of the community, and meteorological observations.

Particular information is requested in regard to epidemics, their causes, preventives, and remedies; their symptoms, time of appearance, duration, and mortality; detailing the most successful treatment, and their effect upon the healthfulness of the community after the epidemics have passed off.

All diseases which approach an epidemic type in any locality, come within the range of investigation, and it is hoped will receive the attention of Reporters.

For all information received, full credit will be given in the report, and as the appointment is to continue for three years, it is hoped that every portion of the State will be reached.

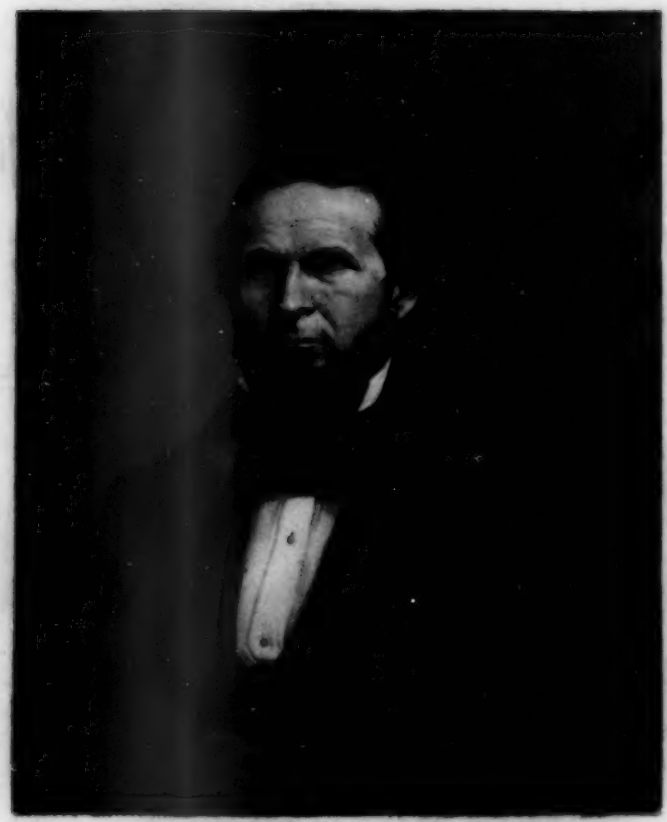
It would facilitate the work very much if the District Medical Societies would appoint in each, one or more competent persons to take charge of it, and report early in the year 1856.

All communications may be addressed to the undersigned at Newark.

L. A. SMITH.

Newark, *July* 7, 1855.

N. B.—Editors of papers in this State, are requested to publish this circular, and call attention to it.



Chas. T. Pope.

PROFESSOR OF THE PRINCIPLES & PRACTICE OF SURGERY &C.
IN THE MEDICAL DEP'T OF THE UNIVERSITY OF ST LOUIS.

Engraved expressly for the New Jersey Medical Reporter.